

General

Guideline Title

Recommendations on behavioural interventions for the prevention and treatment of cigarette smoking among school-aged children and youth.

Bibliographic Source(s)

Canadian Task Force on Preventive Health Care. Recommendations on behavioural interventions for the prevention and treatment of cigarette smoking among school-aged children and youth. CMAJ. 2017 Feb 27;189(8):E310-E316. [29 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

NEATS Assessment

National Guideline Clearinghouse (NGC) has assessed this guideline's adherence to standards of trustworthiness, derived from the Institute of Medicine's report [Clinical Practice Guidelines We Can Trust](#).

■■■■■= Poor ■■■■= Fair ■■■■= Good ■■■■= Very Good ■■■■= Excellent

Assessment	Standard of Trustworthiness
YES	Disclosure of Guideline Funding Source
■■■■■	Disclosure and Management of Financial Conflict of Interests
	Guideline Development Group Composition
YES	Multidisciplinary Group
UNKNOWN	Methodologist Involvement

	Patient and Public Perspectives
	Use of a Systematic Review of Evidence
	Search Strategy
	Study Selection
	Synthesis of Evidence
	Evidence Foundations for and Rating Strength of Recommendations
	Grading the Quality or Strength of Evidence
	Benefits and Harms of Recommendations
	Evidence Summary Supporting Recommendations
	Rating the Strength of Recommendations
	Specific and Unambiguous Articulation of Recommendations
	External Review
	Updating

Recommendations

Major Recommendations

The grades of recommendations (strong, weak) and grades of evidence (high, moderate, low, very low) are defined at the end of the "Major Recommendations" field.

Summary of Recommendation for Clinicians and Policy-makers

Prevention

The Canadian Task Force on Preventive Health Care (CTFPHC) recommends asking children and youth (age 5–18 years) or their parents about tobacco use by the child or youth and offering brief* information and advice, as appropriate, during primary care visits[†] to prevent tobacco smoking among children and youth (weak recommendation, low-quality evidence).

The recommendation for prevention interventions applies to children and youth 5 to 18 years of age who do not currently smoke tobacco, whether they have never smoked or are former smokers, and who do not have cognitive deficits, mental or physical health issues, or a history of alcohol or drug abuse.

Treatment

The CTFPHC recommends asking children and youth (age 5–18 years) or their parents about tobacco use by the child or youth and offering brief* information and advice, as appropriate, during primary care visits[†] to treat tobacco smoking among children and youth (weak recommendation, low-quality evidence).

The recommendation for treatment interventions applies to children and youth 5 to 18 years of age who have smoked tobacco within the past 30 days and who do not have cognitive deficits, mental or physical health issues, or a history of alcohol or drug abuse.

*Contact time with primary care clinician of up to five minutes. Advice may include verbal communication about patient attitudes and beliefs, risks of smoking and strategies for dealing with the influence of peers. Sharing of printed or electronic material (e.g., brochures, newsletters and interactive computer programs) could also be considered.

†Appropriate primary care visits include scheduled health supervision visits, visits for vaccinations, medication renewal, episodic care or acute illness, and other visits where the primary care practitioner deems it appropriate. Primary care visits are completed in primary health care settings, including those outside of a physician's office (e.g., public health nurses carrying out a well-child visit in a community setting).

Definitions

Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group Grades of Evidence

High quality — Further research is very unlikely to change confidence in the estimate of effect.
Moderate quality — Further research is likely to have an important impact on confidence in the estimate of effect and may change the estimate.
Low quality — Further research is very likely to have an important impact on confidence in the estimate of effect and is likely to change the estimate.
Very low quality — The CTFPHC is very uncertain about the estimate.

Grading of Recommendations

Strong recommendations are those for which the CTFPHC is confident that the desirable effects of an intervention outweigh its undesirable effects (strong recommendation for an intervention) or that the undesirable effects of an intervention outweigh its desirable effects (strong recommendation against an intervention). A strong recommendation implies that most individuals will be best served by the recommended course of action.

Weak recommendations are those for which the desirable effects probably outweigh the undesirable effects (weak recommendation for an intervention) or undesirable effects probably outweigh the desirable effects (weak recommendation against an intervention), but appreciable uncertainty exists. Weak recommendations result when the balance between desirable and undesirable effects is small, the quality of evidence is lower, or there is more variability in the values and preferences of patients. A weak recommendation implies that most people would want the recommended course of action but that many would not. Clinicians must recognize that different choices will be appropriate for each individual, and they must help each person arrive at a management decision that is consistent with his or her values and preferences. Policy-making will require substantial debate and involvement of various stakeholders.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

- Tobacco dependence
- Smoking-related diseases

Guideline Category

Counseling

Prevention

Screening

Treatment

Clinical Specialty

Family Practice

Pediatrics

Preventive Medicine

Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To present evidence-based recommendations on behavioural interventions for the prevention and treatment of tobacco smoking among children and youth (age 5–18 years)

Target Population

Children and youth, ages 5 to 18 years who do not have cognitive deficits, mental or physical health issues, or a history of alcohol or drug abuse

Interventions and Practices Considered

1. Asking children and youth or their parents about tobacco use
2. Offering brief information and advice during primary care visits to prevent tobacco smoking
3. Offering brief information and advice during primary care visits to treat tobacco smoking

Note: This guideline does not address use of smokeless tobacco products or e-cigarettes. E-cigarette interventions for smoking cessation were not considered because none have been approved for use by children and youth in Canada.

Major Outcomes Considered

- Incidence of smoking
- Smoking cessation
- Prevalence of tobacco use in adulthood
- Adverse effects, such as anxiety and discomfort

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Searches of Unpublished Data

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic review was prepared by the McMaster University Evidence Review and Synthesis Centre for the Canadian Task Force on Preventive Health Care (CTFPHC) (see the "Availability of Companion Documents" field).

Search Strategy

For the key questions on benefits of interventions for preventing tobacco smoking and benefits and harms of interventions for treating tobacco smoking among school-aged children and youth, an updated the search was done for the 2012 U.S. Preventive Services Task Force (USPSTF) review on this same topic. The USPSTF review, ranked by the Evidence Review and Synthesis Centre as a high-quality review with an Assessing the Methodological Quality of Systematic Reviews (AMSTAR) rating of 10/11 (see Appendix A of the systematic review), evaluated trials considered and included in three previous reviews that covered the tobacco prevention literature through July 2002 and the tobacco cessation literature through August 2009 (the USPSTF only considered studies published in or after 1980). The USPSTF then searched for English citations in MEDLINE, PsycINFO, the Cochrane Central Register of Controlled Trials, the Cochrane Database of Systematic Reviews, PubMed and the Database of Abstracts of Reviews of Effects starting January 2002 to September 14, 2012 for smoking prevention and starting January 2009 to September 14, 2012 for smoking cessation. Following peer review of the USPSTF strategy using the Peer Review Electronic Search Strategies (PRESS) methodology and checklist (see Appendix B of the systematic review) and peer review of a draft protocol for this review, an adapted strategy was used to update the search for the period from January 30, 2012 to April 15, 2015. For this update search an additional database (EMBASE) was included and allowed for citations in both English and French. Since no pharmaceuticals or nicotine replacement therapies (NRTs) are currently approved in Canada for use by children and adolescents for smoking cessation the USPSTF's search for smoking cessation pharmacotherapy was not updated. The USPSTF's search for studies of behavioural or other non-pharmacological interventions was limited to randomized controlled trials (RCTs). A separate harms search was performed that was not limited by study type. This search was undertaken in the same databases and with the same dates as the other treatment searches. A manual search of recent on-topic systematic reviews was also conducted to look for relevant primary studies not captured by our electronic database search.

A separate search was performed to seek evidence to answer the contextual questions. This strategy included three databases (MEDLINE, EMBASE and PsycINFO) and looked for relevant citations in English and French from 2005 to March 11, 2015. In addition, a focused Web-based grey literature search was undertaken using the Canadian section of the Canadian Agency for Drugs and Technologies in Health Grey Matters search tool and Google advanced search (limited to Canada) to look for recent on-topic sources providing Canadian specific information.

Appendix C of the systematic review provides the search strategies for the key and contextual questions.

Other Sources of Potential Evidence

Review team members evaluated the 19 studies included in the 2012 USPSTF review and the five studies the USPSTF excluded due to study quality issues for eligibility based on the inclusion criteria.

Study Selection

After removing all duplicates, citations found through the updated search, as well as citations from the USPSTF review, were uploaded to a Web-based systematic review software program (DistillerSR16) for screening. The titles and abstracts of papers considered for the key questions were reviewed independently by two raters. Any citations selected for inclusion by either team member went on to full-text review. Full-text screening was done independently by two reviewers with consensus required for inclusion or exclusion. All conflicts were discussed by the respective reviewers, and a third team member was consulted to resolve any disagreements.

As per the CTFPHC methods manual (see the "Availability of Companion Documents" field), contextual questions were addressed through a literature review rather than a formal systematic review. The process for selecting studies to answer the contextual questions involved title and abstract screening by two independent raters (citations selected for inclusion by either team member moved on to full-text review), full-text relevance screening by two independent raters (with consensus required for exclusion), and data extraction by one review team member.

Inclusion and Exclusion Criteria

The inclusion and exclusion criteria that were used to select studies to answer the key questions are summarized separately for prevention and for treatment in Tables 1 and 2 of the systematic review respectively. The criteria are generally consistent with the conditions set forth in the USPSTF's 2012 review but in some cases were narrowed. For example, the USPSTF included smokeless tobacco products but this review was limited to combustible tobacco products; the USPSTF included nicotine replacement therapies but this review did not; and the USPSTF accepted a single, brief contact per year or brief written materials as acceptable comparisons, while this review considered this as low intensity intervention and required comparison groups to have no content specifically designed or intended to prevent or treat tobacco smoking in school-aged children and youth.

Number of Source Documents

After removing duplicates, 2,118 citations (2,094 from the updated search and 24 from the USPSTF review) were identified for screening. A total of 1,938 articles were excluded at title and abstract, leaving 180 to be reviewed at the full-text level. At this level 31 systematic reviews were identified (11 were on-topic and recent) and 171 studies were excluded. No additional studies were identified through a hand-search of the included studies' lists of the on-topic and recent systematic reviews. At the end of the search and selection process, nine studies met the inclusion criteria for this review. Of these nine studies, seven appeared in the 2012 U.S. Preventive Services Task Force (USPSTF) review and two were located by the updated search.

Refer to Figure 2 in the systematic review (see the "Availability of Companion Documents" field) for more information on the literature search results.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group Grades of Evidence

High quality — Further research is very unlikely to change confidence in the estimate of effect.
Moderate quality — Further research is likely to have an important impact on confidence in the estimate of effect and may change the estimate.

Low quality — Further research is very likely to have an important impact on confidence in the estimate of effect and is likely to change the estimate.
Very low quality — The Canadian Task Force on Preventive Health Care is very uncertain about the estimate.

Methods Used to Analyze the Evidence

Meta-Analysis

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic review was prepared by the McMaster University Evidence Review and Synthesis Centre for the Canadian Task Force on Preventive Health Care (CTFPHC) (see the "Availability of Companion Documents" field).

Data Extraction and Quality Assessments

For each study used to answer the key questions, review team members extracted data about the population, study design, intervention, analysis and results for outcomes of interest. All randomized controlled trials (RCTs) were assessed using the Cochrane Risk of Bias Tool which resulted in low, unclear, or high study risk of bias ratings (see Table 3 of the systematic review for summary). For each study, one team member completed full extraction (study characteristics, risk of bias assessment, outcome data) using standardized forms located on the DistillerSR platform, and a second team member verified all extracted data and ratings. Any disagreements were resolved through discussion with third party consultation if consensus could not be reached. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) system was used to assess the strength and quality of the evidence for all outcomes ranked by the CTFPHC working group members as critical or important. The GRADE system rates the quality of a body of evidence as high, moderate, low or very low (see the "Rating Scheme for the Strength of the Evidence" field). A GRADE quality rating is based on an assessment of five conditions: (1) risk of bias (limitations in study designs), (2) inconsistency (statistical heterogeneity) in the direction and/or size of the estimates of effect, (3) indirectness of the body of evidence to the populations, interventions, comparators and/or outcomes of interest, (4) imprecision of results (few participants, events or observations; wide confidence intervals or including null value), and (5) indications of reporting or publication bias. The body of RCT evidence begins with a high-quality rating which may be downgraded if there are serious or very serious concerns across the evidence related to one or more of the five conditions.

Data extraction for the articles selected to address the contextual questions was performed by one team member. There was no assessment of the methodological quality of these studies.

Data Analysis

To perform meta-analyses for the binary outcomes of benefit (incidence of smoking, incidence of stopping smoking) review team members utilized the number of events, proportion or percentage data from included RCTs to generate the summary measures of effect in the form of risk ratios (RRs) using the DerSimonian and Laird random effects model with Mantel-Haenszel method. The data from cluster-randomized trials were further adjusted for clustering or design effect before inclusion in meta-analyses (see Chapter 16, Section 16.3.4 in the *Cochrane Handbook for Systematic Reviews of Interventions*). The intracluster correlation coefficient was obtained from existing literature. The data from smoking prevention studies were also adjusted for baseline smoking prevalence if the overall sample included a proportion of smokers at baseline in each arm. In addition, for the benefits that showed significant effects, review team members calculated absolute risk reduction (ARR) or absolute risk increase (ARI) and

number needed to treat (NNT) and added these values to the GRADE tables. The NNTs were calculated using the absolute numbers presented in the GRADE tables estimated using the control group event rate and RR with the 95% confidence interval (CI) obtained from the meta-analysis (see Chapter 12, Section 12.5.4.2 in the *Cochrane Handbook for Systematic Reviews of Interventions*). The analyses were performed using Review Manager Version 5.3 and GRADEpro software packages. When studies did not provide data necessary for pooling (i.e., when sample sizes, baseline data, and follow-up data were not reported separately for intervention and control groups), the results were described narratively.

For outcomes of benefit, further subgroup analyses based on baseline age (5-12 years, 13-18 years), baseline tobacco smoking status (never, former, regular [daily or weekly], occasional), intervention intensity (high [e.g., ≥ 2 meetings/interactions with a health professional of any length or one long session, such as a half-day or full-day workshop], low [e.g., 1 brief meeting or encounter with a health professional or provision of written materials such as a pamphlet]), and study risk of bias rating (high, unclear, low) were conducted where possible to evaluate statistical stability and potential differences in intervention effect. The Cochran's Q ($\alpha=0.05$) was employed to detect statistical heterogeneity and the I^2 statistic was used to quantify the magnitude of statistical heterogeneity between studies (a rough guide for interpretation, with overlapping thresholds, suggests I^2 of 0% to 40% might not be important, 30% to 60% may represent moderate heterogeneity, 50% to 90% may represent substantial heterogeneity, and 75% to 100% suggests considerable heterogeneity).

For the questions about features of efficacious interventions, review team members identified these interventions from studies included in the incidence of smoking and incidence of stopping smoking meta-analyses that showed statistically significant effects in favour of the intervention group. For all studies that met this criterion review team members summarized key features of the target populations (e.g., age, sex, baseline smoking status) and the interventions (e.g., components, modes of delivery, role of primary care, intensity, duration).

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Methods

The Canadian Task Force on Preventive Health Care (CTFPHC) is an independent panel of clinicians and methodologists that develops recommendations on primary and secondary prevention in primary care (www.canadiantaskforce.ca)

The CTFPHC uses a standard process for the development of all clinical practice guidelines. CTFPHC guidelines are developed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. Work on each set of recommendations is led by a workgroup of 2 to 6 members of the task force. The work group establishes an a priori research design with predetermined key questions, analytic framework, outcomes of interest and search strategy to guide a systematic review of evidence. An independent organization is commissioned to conduct the systematic review of evidence using the a priori framework. The systematic review also includes an assessment of the methodological quality of the individual studies included in the review. The work group further evaluates the strength and quality of the overall body of evidence for each of the outcomes of interest for each of the research questions and considers of the balance of benefits and harms for specific interventions, patient values and preferences, and resource considerations. Recommendations are formulated based upon this comprehensive assessment of evidence. Rationale for the recommendations, and judgement and values applied by the guideline panel are reported as part of guideline. Each phase of process includes peer review by methodologists and content experts. Additionally, stakeholders are invited to provide comments on protocol, systematic review and the draft guidelines. All members of the CTFPHC reviews

and approve each phase of guideline development.

The current guideline was led by a working group comprised of 4 CTFPHC members and two clinical experts, with support from scientific staff at the Public Health Agency of Canada (PHAC). The working group established the key and contextual questions, outcomes, analytical framework, and search strategy that were used to develop the research protocol. The Evidence Review and Synthesis Centre (ERSC) at McMaster University (Hamilton, Ontario) independently conducted a systematic review in accordance with the research protocol.

Analytical Framework and Key Questions (KQs)

The analytic framework, presented in Appendix 1 of the original guideline document and in the accompanying systematic review (see the "Availability of Companion Documents" field), includes both prevention and treatment of child and youth tobacco smoking.

Prevention

Are behaviourally based interventions relevant to the Canadian primary care setting that are designed to prevent tobacco smoking effective in preventing school-aged children and youth from trying or taking up tobacco smoking?

Are there differences in the incidence of tobacco smoking across subgroups, as defined by: (i) baseline age (5-12 years, 13-18 years), (ii) baseline tobacco smoking status (never, former [e.g., have tried smoking tobacco in past but not in last 30 days]), (iii) intervention intensity (high [e.g., ≥ 2 meetings/interactions with a health professional of any length or one long session, such as a $\frac{1}{2}$ day or entire day workshop], low [≤ 1 brief meeting or encounter with a health professional or provision of written materials such as a pamphlet]), and (iv) study risk of bias rating (low, unclear, high)?

What are the elements of efficacious interventions designed for preventing tobacco smoking in school-aged children and youth?

Are behaviourally based interventions relevant to Canadian primary care that are designed to prevent tobacco smoking in school-aged children and youth effective in reducing future tobacco smoking during adulthood?

Treatment

Are behaviourally based and non-pharmacological alternative and complementary interventions relevant to the Canadian primary care setting that are designed to help school-aged children and youth stop ongoing tobacco smoking effective in achieving smoking cessation?

Are there differences in the incidence of stopping smoking across subgroups, as defined by: (i) baseline age (5-12 years, 13-18 years), (ii) baseline tobacco smoking status (current regular [daily or weekly], current occasional), (iii) intervention intensity (high [e.g., ≥ 2 meetings/interactions with a health professional of any length or one long session, such as a $\frac{1}{2}$ day or entire day workshop], low [≤ 1 brief meeting or encounter with a health professional or provision of written materials such as a pamphlet]), and (iv) study risk of bias rating (low, unclear, high)?

What are the elements of efficacious interventions designed to help school-aged children and youth stop ongoing tobacco smoking?

Are behaviourally based and non-pharmacological alternative and complementary interventions relevant to the Canadian primary care setting that are designed to help school-aged children and youth stop ongoing tobacco smoking effective in reducing future tobacco smoking in adulthood?

What if any, adverse effects are associated with behaviourally based and non-pharmacological alternative and complementary interventions designed to help school-aged children and youth stop ongoing tobacco smoking?

Contextual Questions

What are school-aged children's and youth's preferences and values regarding how and under what

conditions they are asked about their personal tobacco smoking history?
What are participants' (children, adolescents, parents) preferences and values regarding interventions designed to prevent or treat tobacco smoking by children and youth?

Grading of Recommendations

Recommendations are graded according to the GRADE system. GRADE offers two strengths of recommendation: strong and weak. The strength of recommendations is based on the quality of supporting evidence, degree of uncertainty about the balance between desirable and undesirable effects, degree of uncertainty or variability in patient values and preferences, and degree of uncertainty about whether the intervention represents a wise use of resources.

Rating Scheme for the Strength of the Recommendations

Grading of Recommendations

Strong recommendations are those for which the Canadian Task Force on Preventive Health Care is confident that the desirable effects of an intervention outweigh its undesirable effects (strong recommendation for an intervention) or that the undesirable effects of an intervention outweigh its desirable effects (strong recommendation against an intervention). A strong recommendation implies that most individuals will be best served by the recommended course of action.

Weak recommendations are those for which the desirable effects probably outweigh the undesirable effects (weak recommendation for an intervention) or undesirable effects probably outweigh the desirable effects (weak recommendation against an intervention), but appreciable uncertainty exists. Weak recommendations result when the balance between desirable and undesirable effects is small, the quality of evidence is lower, or there is more variability in the values and preferences of patients. A weak recommendation implies that most people would want the recommended course of action but that many would not. Clinicians must recognize that different choices will be appropriate for each individual, and they must help each person arrive at a management decision that is consistent with his or her values and preferences. Policy-making will require substantial debate and involvement of various stakeholders.

Cost Analysis

Economic Implications

The task force did not review the evidence on the economic implications of interventions in developing this guideline. However, low-intensity behavioural interventions for the prevention and treatment of smoking, such as offering brief information and advice, would be expected to have low resource implications.

Method of Guideline Validation

Comparison with Guidelines from Other Groups

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

The guideline was reviewed and approved by the entire task force and underwent external review by stakeholders and content experts. The Feasibility, Acceptability, Cost and Health Equity (FACE) tool was used with organizational stakeholders to gain stakeholders' perspective on the priority, feasibility,

acceptability, cost and equity of the recommendations (a description of the FACE tool is available from the guideline authors upon request).

Other Guidelines

This guideline is consistent with those from most Canadian and international bodies (except for the New Zealand Ministry of Health) that recommend in favour of delivering preventive interventions for tobacco smoking. Similarly, all identified organizations recommend in favour of behavioural interventions to treat tobacco smoking in children and youth. The only organization that did not address treatment for tobacco smoking in this age group was the U.S. Preventive Services Task Force (see Table 1 in the original guideline document).

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

In the judgment of the task force, recommendations in favour of low-intensity behavioural interventions for the prevention and treatment of smoking among children and youth (age 5–18 years) are warranted given the potentially moderate reduction in smoking initiation, the modest increase in the likelihood that youth will stop smoking, the similar size effect of low- and high-intensity interventions, the high likelihood that harms of preventive and treatment interventions are minimal, and that stakeholders find interventions important and acceptable.

Potential Harms

No evidence was found on treatment harms.

Qualifying Statements

Qualifying Statements

The views of the funding bodies have not influenced the content of the guideline. The views expressed in this article are those of the authors and do not necessarily represent those of the Public Health Agency of Canada.

Gaps in Knowledge

Tobacco smoking is a potentially reversible driver of disease and health care costs, but there is a lack of high-quality randomized controlled trials (RCTs) that have examined the short- and long-term benefits of behavioural prevention and treatment interventions for children and youth in primary health care settings. More research is needed to identify the characteristics of the most effective interventions for smoking

prevention and cessation, including factors such as the type of advice provided, the duration of the intervention, the type of provider and the contact time needed. There is no conclusive evidence on the potential harmful effects of e-cigarettes or whether they can be used in smoking cessation interventions for either adults or youth. This should be a research priority.

Better data on the values and preferences of children and youth on prevention and treatment interventions are also needed. This research should be a high priority for researchers, research funders and policy-makers. Smoking tends to be concentrated among youth who have alcohol or substance abuse issues or physical or mental health issues. However, because of these characteristics, the interventions could affect them differently. Further research is needed to assess the benefits and harms of applying preventive and treatment interventions in at-risk populations.

Implementation of the Guideline

Description of Implementation Strategy

Considerations for Implementation

Primary care practitioners (e.g., family physicians and nurses) have procedures or guidance in place in the primary health care setting to assess the smoking risk or smoking status of children and youth. If they determine that there may be a need for a preventive or cessation intervention, the primary care practitioner should ask if the child or youth, or parent or guardian, is interested in having a brief conversation that may help prevent the uptake of smoking or stop smoking.

The implication of a weak recommendation is that most children and youth and their parents or caregivers would want the recommended course of action, but many would not (see Box 1 in the original guideline document). Clinicians must help each child or youth or family make a decision that is consistent with their values and preferences. Those who are concerned about the potential for a child or youth to start smoking, are interested in a small increase in the likelihood that a child or youth will not start smoking or will stop smoking in the short term with receipt of the intervention, and are less concerned about the lack of evidence on whether the intervention will reduce smoking into adulthood may choose to participate. Conversely, a parent may choose to decline on the basis of the limited evidence available or if the risk of their child smoking is low.

For those who agree to participate, primary care practitioners should offer them brief information and advice at appropriate primary care visits. Primary care practitioners who may deliver the intervention include family physicians, nurses or other appropriate members of the health care team. Brief information and advice may include verbal communication of up to five minutes to discuss patient attitudes and beliefs, risks of smoking, and strategies for dealing with the influence of peers. Sharing of printed or electronic material (e.g., brochures, newsletters and interactive computer programs) could also be considered. Appropriate primary care visits include scheduled health supervision visits, visits for vaccinations, medication renewal, episodic care or acute illness, and other visits where the primary care practitioner deems it appropriate. Primary care visits are completed in primary health care settings, including those outside of a physician's office (e.g., public health nurses carrying out a well-child visit in a community setting).

The task force has developed a tool to help health care practitioners interpret these recommendations for patients and their families (see the "Availability of Companion Documents" field).

Non-expert opinion from organizational stakeholders and health care professionals who participated in the external review process indicated that they believe the recommendations to be feasible, acceptable and affordable and would positively affect health inequities. The task force recognizes that not all those at risk of smoking will or will be able to access primary health care, and this is a consideration that policy-makers will need to address.

Implementation Tools

Audit Criteria/Indicators

Foreign Language Translations

Mobile Device Resources

Quick Reference Guides/Physician Guides

Resources

Slide Presentation

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Canadian Task Force on Preventive Health Care. Recommendations on behavioural interventions for the prevention and treatment of cigarette smoking among school-aged children and youth. CMAJ. 2017 Feb 27;189(8):E310-E316. [29 references] [PubMed](#)

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2017 Feb 27

Guideline Developer(s)

Canadian Task Force on Preventive Health Care - National Government Agency [Non-U.S.]

Source(s) of Funding

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Guideline Committee

Canadian Task Force on Preventive Health Care (CTFPHC) Guideline Work Group

Composition of Group That Authored the Guideline

Authors: Brett D. Thombs, PhD, Lady Davis Institute of Medical Research, Jewish General Hospital, McGill University, Montréal, Que.; Alejandra Jaramillo Garcia, MSc, Public Health Agency of Canada; Dana Reid, MSc, Public Health Agency of Canada; Kevin Pottie, MD, MCIsc, Department of Family Medicine, Epidemiology and Community Medicine, Bruyère Research Institute, University of Ottawa, Ottawa, Ont.; Patricia Parkin, MD, Department of Paediatrics, University of Toronto, Toronto, Ont.; Kate Morissette, MSc, Public Health Agency of Canada; Marcello Tonelli, MD, MS, Department of Medicine, University of Calgary, Calgary, Alta.

Financial Disclosures/Conflicts of Interest

The views of the funding bodies have not influenced the content of the guideline.

Competing Interests: None declared.

Guideline Endorser(s)

College of Family Physicians of Canada - Professional Association

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the [Canadian Medical Association Journal \(CMAJ\) Web site](#) .

Availability of Companion Documents

The following are available:

Peirson L, Ali MU, Kenny M, Raina, P, Sherifali D. Interventions for prevention and treatment of tobacco smoking in school-aged children and adolescents: systematic review and meta-analysis. Evidence Review and Synthesis Centre. Hamilton (ON): McMaster University; 2015 Oct 26. 95 p. Available from the [Canadian Task Force on Preventive Health Care \(CTFPHC\) Web site](#) .

Recommendations on behavioural interventions for the prevention and treatment of cigarette smoking among school-aged children and youth. Online appendices 1–5. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2017. Available from the [Canadian Medical](#)

[Association Journal \(CMAJ\) Web site](#) .

Recommendations on behavioural interventions for the prevention and treatment of cigarette smoking among school-aged children and youth. Clinician summary. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2017. 2 p. Available in [English](#) and [French](#) from the CTFPHC Web site.

Prevention and treatment of cigarette smoking among school-aged children and youth. Clinician FAQ. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2017. 1 p. Available in [English](#) and [French](#) from the CTFPHC Web site.

Peirson L, Kenny M, Ali MU, Rice, M, Raina P, Sherifali D. Interventions for prevention and treatment of tobacco smoking in school-aged children and adolescents: protocol for updating a systematic review and meta-analysis. Hamilton (ON): McMaster University; 2015 Mar 31. 35 p. Available from the [CTFPHC Web site](#) .

Recommendations on behavioural interventions for the prevention and treatment of cigarette smoking among school-aged children and youth. Excluded studies. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2017. 12 p. Available from the [CTFPHC Web site](#) .

Recommendations on behavioural interventions for prevention and treatment of cigarette smoking in school-aged children and youth 2017. CMAJ Podcast. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2017 Feb. Available in [English](#) and [French](#) from the CTFPHC Web site.

Recommendations on behavioural interventions for prevention and treatment of cigarette smoking in school-aged children and youth 2017. Slide presentation. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2017 Feb. 35 p. Available from the [CTFPHC Web site](#) .

Canadian Task Force on Preventive Health Care procedure manual. Ottawa (ON): Canadian Task Force on Preventive Health Care (CTFPHC); 2014 Mar. 83 p. Available from the [CTFPHC Web site](#) .

Suggested performance measures are available in the [original guideline document](#) .

There is a CTFPHC mobile app for primary care practitioners available for download from the [CTFPHC Web site](#) .

Patient Resources

None available

NGC Status

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